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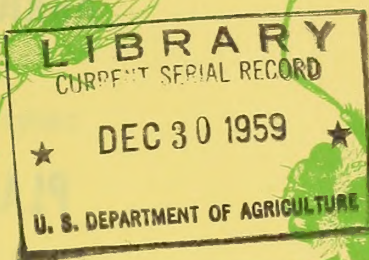
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Cooperative ECONOMIC INSECT REPORT

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AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearinghouse and does not assume responsibility for accuracy of the material.

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COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

Annual CHINCH BUG hibernation survey in Arkansas, Missouri and Nebraska is reported. (p. 1056).

The PINK BOLLWORM program in Arizona is summarized. (p. 1057).

SCREW-WORM infestations reported in Louisiana. (p. 1059).

BOLL WEEVIL hibernation surveys in Texas, Missouri, Tennessee, Louisiana and Mississippi are reported and summarized. (pp. 1061-1063).

Recent INTERCEPTIONS of special interest at U. S. ports of entry. (p. 1064).

INSECT DETECTION: Sweetclover weevil reported for first time in Kentucky. (p. 1056). In California, Oligonychus aceris now occurs in both southern and northern areas, recorded for first time in El Dorado County (p. 1058); and a katydid (Neoconocephalus robustus) recorded for the first time in the State (p. 1060). Imported fire ant found for first time in Newton County, Georgia, and in Franklin County, Mississippi (p. 1060) and pink bollworm recorded in Yell County, Arkansas, for first time. (p. 1058).

Reports in this issue are for the week ending December 18, unless otherwise indicated.

CEREAL AND FORAGE INSECTS

CHINCH BUG (Blissus leucopterus) - ARKANSAS - The annual hibernation survey was conducted in 18 counties in the northeast, east central and southeastern areas of the State. The highest counts were 1,901 per square foot in Lawrence County. Ratings were noneconomic (0-250 bugs per square foot) in 14 counties, light (250-500 per square foot) in one county, moderate (500-1,000 per square foot) in 2 counties and severe (1,000-2,000 per square foot) in one county. Populations appear to be lighter this fall than they were in 1958 and 1957. (Ark. Ins. Sur.). MISSOURI - Annual hibernation survey was conducted in 24 counties in 8 districts of the State. Ratings were noneconomic in 6 counties, light in 11 counties, moderate in 5 counties and severe in Barton and Jasper Counties (southwest district). (Kyd, Thomas, Munson). NEBRASKA - Populations of hibernating chinch bugs were noneconomic in all counties surveyed during the fall of 1959 with the exception of Lancaster County where 917 bugs per square foot were found (moderate rating). The survey was conducted in 29 counties in the east, northeast and southeastern districts. (Simpson).

SWEETCLOVER WEEVIL (Sitona cylindricollis) - KENTUCKY - Adults taken in a sweetclover field near Horse Cave, Hart County, on July 7. Specimens determined by R. E. Warner. This was the first official record of the species in the State. (Starks).

A TINEID (Lindera tessellatella) - CALIFORNIA - Heavy infestation on alfalfa hay in Coalinga, Fresno County. (Cal. Coop. Rpt.).

A SOD FLY (Metoponia rubriceps) - CALIFORNIA - Heavy infestation in grass sod in a cemetery in Colma, San Mateo County. (Cal. Coop. Rpt.).

FRUIT INSECTS

CITRICOLA SCALE (Coccus pseudomagnoliarum) - ARIZONA - Light to medium infestations present on a ranch near Peoria in Maricopa County. Edges of a few groves are heavily infested but the infestations decrease rapidly on inner trees. (Ariz. Coop. Sur.).

BLACK SCALE (Saissetia oleae) - CALIFORNIA - A heavy infestation occurring in a local olive grove in Shasta County. This is the only known infestation in Shasta County. (Cal. Coop. Rpt.).

COTTONY-CUSHION SCALE (Icerya purchasi) - ARIZONA - Infestations which have been hanging on in a few groves in Maricopa County are now almost nonexistent. Some yard plantings in Yuma County are lightly infested. (Ariz. Coop. Sur.).

CALIFORNIA RED SCALE (Aonidiella citrina) - ARIZONA - Light activity occurring in Yuma County yard plantings. One new infestation found during the past week. (Ariz. Coop. Sur.).

CITRUS BLACKFLY (Aleurocanthus woglumi) - MEXICO - A very light infestation found in Monterrey, Nuevo Leon, on November 14; first infestation found since March 1958. Surveys in the chemical and free zones of the states of Tamaulipas, Nuevo Leon, Sonora and Baja California were conducted on 2,367 properties. Fifty-five trees were found infested, of 62,264 inspected, on 8 properties. The infested properties were located as follows: One with one tree in Monterrey; 4 with 30 trees in Allende and 2 with 23 trees in Linares, Nuevo Leon; one with one tree in Marroquin of the Municipio Hidalgo, Tamaulipas. This latter infestation involved only one leaf which was destroyed and the property put under observation without treatment. (PPC, Mex. Reg., Nov. Rpt.).

MEXICAN FRUIT FLY (*Anastrepha ludens*) - ARIZONA - Total of 146 traps on 21 properties in Yuma Valley and Yuma Mesa in Yuma County and 27 traps on 16 properties in Santa Cruz County were serviced weekly, with negative results. CALIFORNIA - Trapping operations continued in San Diego and Imperial Counties, with negative results. Larval inspections on 105 properties in San Diego County were also negative. (PPC, West. Reg., Nov. Rpt.). TEXAS - First official determination of *A. ludens* made of a female collected on November 24 in an orange grove adjacent to the city limits of Weslaco, Hidalgo County. Total number of traps operated during November was 2,364; 40 more than the total number operated during October. (PPC, Sou. Reg., Nov. Rpt.). MEXICO - Trapping operations continued at Tijuana, Tecate, Ensenada and Mexicali in Baja California and at San Luis R. C., Sonora. A total of 2,141 traps on 996 properties were operated, with negative results, during November. In Tijuana, the final spray application of the season was completed. (PPC, Mex. Reg., Nov. Rpt.).

TRUCK CROP INSECTS

CORN EARWORM (*Heliothis zea*) - CALIFORNIA - Light infestation of artichoke buds in San Gregorio, San Mateo County. (Cal. Coop. Rpt.).

SWEETPOTATO WEEVIL (*Cylas formicarius elegantulus*) - The harvest season of sweetpotatoes reached its peak in most of the areas affected by the program. In ALABAMA, 42 new infestations were found in 5 counties, with about two-thirds of these being found in Geneva and Mobile Counties. By the end of November, 82 properties were actively infested in 6 counties in southern Alabama. Total of 27 new infestations found in 5 GEORGIA counties during November, which brings to a total of 77 the actively infested properties in 11 counties. Inspections in LOUISIANA revealed 88 properties in 10 parishes with new infestations, bringing to a total of 519 the number of infested properties in 15 parishes. In MISSISSIPPI, 29 properties found infested in 6 counties. By the end of November, a total of 160 properties were infested in 10 counties. In SOUTH CAROLINA, no new infestations found during November. As far as known, only 11 infestations in 3 counties exist. (PPC, Sou. Reg., Nov. Rpt.)

COTTON INSECTS

PINK BOLLWORM (*Pectinophora gossypiella*) - ARIZONA - As of the end of November, surveys had established the presence of pink bollworm in the State as follows:

<u>County</u>	<u>Number of Localities</u>	<u>Number of Properties</u>	<u>Number of Acres</u>
Central area			
Maricopa	15	31	1,424
Pinal	5	30	1,545
Santa Cruz	1	1	16
Total	21	62	2,985
Eastern area			
Cochise	2	5	240
Graham	4	41	1,443
Greenlee	2	2	39
Total	8	48	1,722
Grand total	29	110	4,707

The 1959 fall aerial pink bollworm insecticide program in the State was concluded on November 10. Treatments were made in October and November on 37 fields in Maricopa and Pinal Counties as follows:

<u>County</u>	<u>No. of Fields</u>	<u>Field Acreages</u>	<u>Cumulative Acreage</u>
Maricopa	15	359	1,671
Pinal	22	1,239	3,250
Total	37	1,598	4,921

(PPC, West, Reg., Nov. Rpt.)

MISSOURI - Inspections of gin trash and lint cleaners, which began on September 14, were completed on November 13. A total of 5,526 bushels of gin trash was inspected in Butler, Dunklin, Mississippi, New Madrid, Pemiscot, Scott and Stoddard Counties. Thirty-seven lint cleaner inspections were made of 43,864 bales of cotton at 10 locations other than where gin trash was secured. All inspections were negative. (PPC, Cent. Reg., Nov. Rpt.). ARKANSAS - Found for first time in Yell County during November. OKLAHOMA - Recovered from new locations in Custer, Beckham, Greer, Harmon, Jackson, Kiowa and Tillman Counties during November. The Custer County find was the first for this season in that county. (PPC, Sou. Reg., Nov. Rpt.). MEXICO - In West Mexico, states of Baja California and Sonora, 8,514 bushels of gin trash were inspected and 3,648 lint cleaner inspections were made, with negative results. Light trap catches were also negative. In the regulated area of East Mexico, states of Durango and Coahuila, 35 lint cleaner inspections were made and 1,713 pink bollworm larvae were recorded. (PPC, Mex. Reg., Nov. Rpt.).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

WESTERN PINE BEETLE (Dendroctonus brevicomis) - CALIFORNIA - Causing severe damage to young ponderosa pine saw timber by top and complete kill in groups of 2-5 in a 100-acre stand in the Bass Lake area of Fresno County. This insect is increasing and involves both private and public lands. Salvage control or treatment is recommended. (L. Barlow, C. B. Eaton).

PINE ENGRAVERS (Ips spp.) - Heavy infestation of I. integer and I. radiatae on Monterey pine in Colma, San Mateo County. (Cal. Coop. Rpt.).

A SPIDER MITE (Oligonychus aceris) - CALIFORNIA - Light infestations on maple trees in Placerville, El Dorado County. This mite has now been taken in both southern and northern areas of the State. This is the first record for El Dorado County. (Cal. Coop. Rpt.).

GYPSY MOTH (Porthetria dispar) - NEW YORK - Scouting around site of single moth catch in Greenville, Orange County, during summer of 1959 was negative. Scouting is underway at sites of single moth catches in Cornwall, Orange County (1957 treatment area) and Maryland, Otsego County (1959 treatment area), with negative results to Nov. 30. Ten acres were negatively scouted in Davenport, Delaware County, but in Deerfield, Oneida County, a single infestation of 2 egg masses was discovered. This is the site of 2 1959 trap recoveries. CONNECTICUT - Three large areas in northwestern area were scouted, with indications that intensity of infestation has declined in this area. NEW JERSEY - Extensive scouting in Montague area was negative. Scouting was resumed at Jockey Hollow Park, Morristown, as a delimiting operation. PENNSYLVANIA - Scouting in Luzerne, Pike and Perry Counties was negative. (PPC, East. Reg., Nov. Rpt.).

CYPRESS BARK BEETLE (Phloeosinus cupressi) - CALIFORNIA - Medium infestation on Thuja sp. in Concord, Contra Costa County. (Cal. Coop. Rpt.).

SAN JOSE SCALE (Aspidiotus perniciosus) - CALIFORNIA - A medium infestation in conjunction with Aleuroplatus coronatus on white oak leaves in Loomis, Placer County. (Cal. Coop. Rpt.).

A WOOLLY PINE NEEDLE APHID (Schnizolachnus pini-radiatae) - CALIFORNIA - Heavy population on Monterey pine on a property in Redwood City, San Mateo County. (Cal. Coop. Rpt.).

WHITE PEACH SCALE (Pseudaulacaspis pentagona) - NORTH CAROLINA - Severe infestations locally on privet in Union County and undetermined host in Rowan County. (Marsh, Corriher, Farrier).

A SPIDER MITE (Eotetranychus lewisi) - CALIFORNIA - Heavy infestation of poinsettia in Riverside, Riverside County. (Cal. Coop. Rpt.).

INSECTS AFFECTING MAN AND ANIMALS

COMMON CATTLE GRUB (Hypoderma lineatum) - ARIZONA - Untreated animals in Yuma and Pinal Counties averaged 3 grubs per head in 300 head examined. (Ariz. Coop. Sur.).

SCREW-WORM (Callitroga hominivorax) - LOUISIANA - Two reports of infestations of cattle have been received from West Carroll Parish. Four reports from Madison Parish involving cattle and in two of these more than one animal was reported infested. (Spink). ARIZONA - In Pinal County, 19 cases were reported in cattle during November in 6 herds. All cases were in the range area. (Ariz. Coop. Sur.).

SHEEP SCAB MITE (Psoroptes equi ovis) - VIRGINIA - Found on all of 40 sheep inspected during October and 110 of 130 sheep inspected during November. (Va. Livestock Health Bull.).

CATTLE GRUBS (Hypoderma spp.) - UTAH - Appeared in backs of cattle at St. George and elsewhere in Washington County. (Knowlton).

CATTLE LICE - UTAH - Moderately numerous in Washington County. Three thousand cattle were sprayed recently. (Knowlton).

STORED- PRODUCT INSECTS

Stored-grain Insect Survey in Nebraska: Insect infestations present in 51.2 percent of the wheat and 80 percent of the corn bins examined throughout the State. Saw-toothed grain beetle (Oryzaephilus surinamensis) and flat grain beetle (Cryptolestes pusillus) were more numerous than other insects, both in wheat and corn. Other insects found were cadelle (Tenebroides mauritanicus), rice weevil (Sitophilus oryza), granary weevil (Sitophilus granarius) and dermestids. All corn sampled was originally stored in 1952 and 1953. (Kantack).

LESSER GRAIN BORER (Rhyzopertha dominica) - OREGON - Light to moderate infestations found in stored barley in a mill in northwest Portland on December 8. (Eppley, Chinn, Foster).

MISCELLANEOUS INSECTS

AN EARWIG (Labidura riparia)-LOUISIANA - Specimens reported in CEIR 9(47):1010 have been determined by A. B. Gurney as this species. (Spink).

IMPORTED FIRE ANT (Solenopsis saevissima richteri) - Infestations found for first time in Newton County, GEORGIA, and in Franklin County, MISSISSIPPI, during November. (PPC, Sou. Reg.).

A KATYDID (Neoconocephalus robustus) - CALIFORNIA - This eastern species was collected in the Timbuctoo area of Yuba County in July and the Folsom area of Sacramento County. This is the first record of this katydid in the State. (J. Helfer, Dec. 11).

LIGHT TRAP COLLECTIONS

	Pseud. unip.	Agrotis ypsilon	Perid. marg.	Feltia subterr.	Prodenia ornith.	Laphygma exigua
SOUTH CAROLINA						
Clemson 12/12-18	11	3	4		1	
Charleston 12/7-13	9	8		4	1	
LOUISIANA						
Baton Rouge 12/11-18	6	2		2	2	
Franklin 12/11-18				1	9	
ARIZONA						
Mesa 12/7-13			1		114	70

BOLL WEEVIL HIBERNATION SURVEYS - FALL 1959

Collections of surface trash samples (two square yards per sample) were made in seven cotton-producing states during the fall of 1959 by cooperating State and Federal agencies to determine the number of boll weevil (Anthonomus grandis) adults that went into hibernation during the fall of 1959. This is the first year that collections of trash samples from Texas have been reported. These hibernation counts indicate only a potential, however, and the degree of infestation in 1960 will depend largely on weather and other factors that affect the weevils during the winter, spring and early summer of 1960. In addition, spring surveys are normally conducted in the same locations where the fall hibernation surveys were made to determine the percentage of weevils that survive the winter.

The data from the fall collections are tabulated on page 1062. A map is shown on the next page which illustrates the counties in which samples were taken and average number of weevils per acre in the areas involved. In the North Carolina-South Carolina area, only one district is included in this report. The additional districts that are being surveyed in this area will be reported in a later issue of the Cooperative Economic Insect Report.

Details of the Hibernation Survey by States

TEXAS - Woods trash collections were made in McLennan, Falls, Hill and Limestone Counties in central Texas during November, 1959. Three samples were taken from each location and either 6 or 7 locations were sampled in each county. A total of 75 samples were taken from 25 locations in the 4 counties. The average number of weevils found per acre in McLennan, Falls, Hill and Limestone Counties was 9,438, 8,760, 5,227 and 2,710, respectively. The average for the 4-county area was 6,631. Comparative figures are not available for previous years, but observations indicate that weevils in greater than normal numbers were available to enter hibernation this fall. The first freeze was earlier than usual, occurring on November 6. (C. R. Parencia et al.).

MISSOURI - From 10 trash samples collected in northern Dunklin County on November 19, an average of 6,292 weevils per acre were found. This is the first time that weevils have been recovered from trash samples in Missouri. (S. Kyd, G. Thomas, R. Munson).

TENNESSEE - A survey was made in McNairy County this past fall because it usually represents the heaviest weevil infestations in the State. A total of 18 samples were taken. The average number of weevils per acre was 1,882 compared with 1,214 in 1958. This is the highest number of weevils per acre that went into hibernation since the average of 2,365 in 1957 and is a relatively large number of hibernating weevils for this area. Observations of weevil migration into the northern counties of the State were made and after the first of November a large number could be found as far north as Lake County. Weevils in this area do not usually survive the winter, however. (J. H. Locke).

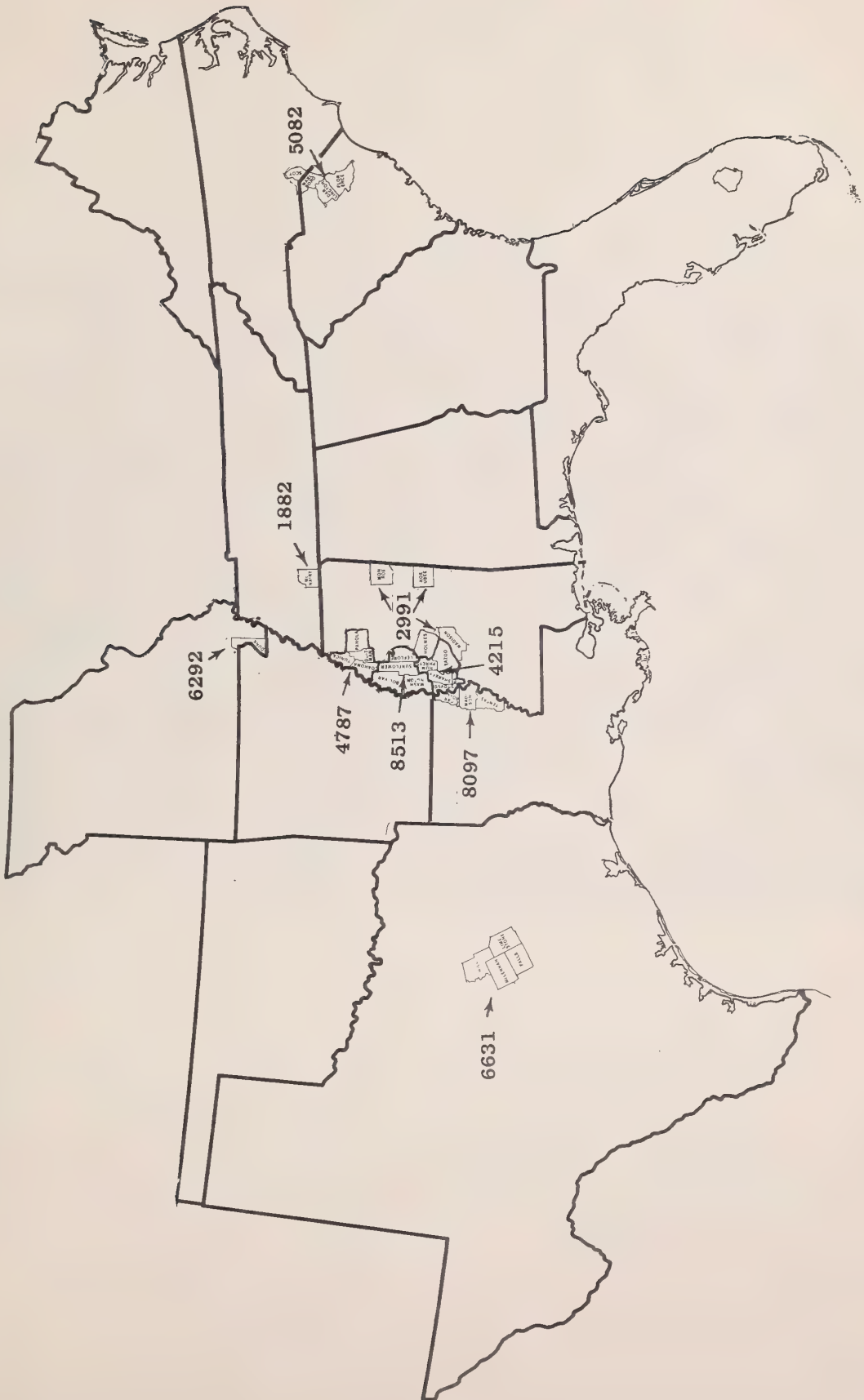
LOUISIANA - Collections of trash samples were made from November 9 through 23 in the northeastern area, composed of Madison, East Carroll and Tensas Parishes. A total of 90 samples were taken at 30 locations in the area. The average number of weevils per acre was 4,923 in Madison Parish, 5,810 in East Carroll Parish and 13,558 in Tensas Parish, with a 3-county area average of 8,097 compared with 5,756 in 1958 and 8,043 in 1957. For the past 24 years similar records have been made in Madison Parish. During this period larger numbers of boll weevils have been found in ground trash in the fall of 1953, 1955, 1957 and 1958 than the 4,923 found in the fall of 1959. (G. L. Smith et al.).

MISSISSIPPI - Collections of trash samples were started on November 9 and completed on November 20. Three samples were taken from each location and either 7 or 8 locations were sampled in each area. A total of 90 samples were taken at 30 locations in 4 areas. The areas surveyed were lower delta (Sharkey, Issaquena, Yazoo and Humphries Counties), central delta (Washington, Bolivar, Sunflower and Leflore Counties), north delta (Coahoma, Tunica, Quitman and Panola Counties) and the hill section (Holmes, Madison, Noxubee and Monroe Counties). The average number of weevils per acre in the lower delta, central delta, north delta and hill section was 4,215, 8,513, 4,787 and 2,991 in 1959 compared with the 1958 averages of 4,242, 4,909, 2,960 and 3,057, respectively. A 1959 State average of 5,127 live weevils per acre was found in trash examinations compared with 3,792 in 1958, 6,715 in 1957 and 2,091 in 1956. (M. E. Merkl et al.).

Fall Surface Trash Examinations for Hibernating Boll Weevils

State	Area or District	Number of Live Weevils Per Acre	
		1958	1959
Texas	Central		6,631
Tennessee	McNairy County	1,214	1,882
Missouri	Dunklin County (northern)		6,292
Louisiana	Northeastern	5,756	8,097
Mississippi	Lower delta	4,242	4,215
	Central delta	4,909	8,513
	North delta	2,960	4,787
	Hill section	3,057	2,991
North and South Carolina	Coastal Plains	4,625	5,082

NUMBER OF HIBERNATING BOLL WEEVILS
in Districts Surveyed - Fall 1959



RECENT INTERCEPTIONS OF SPECIAL INTEREST AT U. S. PORTS OF ENTRY

Larvae of MEXICAN FRUIT FLY (Anastrepha ludens) 4 times in baggage from Mexico for Florida or California destinations, including 2 interceptions at El Paso on August 22, also one at Nogales on July 31; larvae of ORIENTAL FRUIT FLY (Dacus dorsalis Hendel) in mango in baggage at Honolulu destined for the mainland on June 14; larvae of a FRUIT FLY (Anastrepha sp., possibly dissimilis Stone) in Passiflora in stores from the Dominican Republic at Philadelphia on July 27 (this represents the first interception of Anastrepha from Passiflora from the West Indies aside from Trinidad and also the first association, although indefinite, of A. dissimilis with a host and with port interception records); larvae of MEDITERRANEAN FRUIT FLY (Ceratitis capitata (Wied.)) 18 times from several sources, at Miami, Honolulu and New York; larvae or pupae of EUROPEAN CHERRY FRUIT FLY (Rhagoletis cerasi (L.)) in cherries 10 times from Europe, once at Houston and 9 times at New York; larvae and/or adults of KHAPRA BEETLE (Trogoderma granarium) 10 times, at Baltimore (one in each of stores and cartons of tinned tuna fish), at Philadelphia (one in ship's hold), at Houston (2 in stores), at Honolulu (one in stores) and at New Orleans (2 in stores); WHITE GARDEN SNAIL (Theba pisana (Muller)) 13 times, at Charleston (2 on military cargo), at New Orleans (4 on old and new autos from France and on military cargo from Morocco and France), at New York (one on begonia cuttings and 2 on military cargo from Morocco) and at Norfolk (one on motor cannister cargo from France and 3 on military cargo from Morocco); larva of FALSE or CITRUS CODLING MOTH (Cryptophlebia leucotreta (Meyr.)) in orange in stores from South Africa at Tampa on August 24; larva of a WEEVIL (Premnotrypes sp.) in potato in baggage from Peru at Los Angeles on August 12; larvae of a WEEVIL (Sternuchetus sp., possibly frigidus (F.)) in mango in baggage from India at Honolulu on June 13; larva of ASIATIC RICE BORER (Chilo suppressalis (Wlk.)) in packing materials for cargo of strawberries from Japan at Honolulu on April 2; larvae and adult of a PINE GALL WEEVIL (Podapion sp., P. gallicola or P. n. sp.) in pine tree galls in a truck from Mexico at Laredo on June 30; and 2 interceptions of VINE MOTH (Lobesia botrana (Schiff.)) in grapes in baggage from Italy and Sicily, respectively, one at Boston on July 27 and one at New York on August 5. (Plant Quarantine Division).



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